

ABSTRACT

A photodiode for use in an imager having an improved charge leakage.

The photodiode has a doped region that is spaced away from the field isolation

5 to minimize charge leakage. A second embodiment of invention provides a second implant to improve charge leakage to the substrate. The photodiodes according to the invention provide improved charge leakage, improved reactions to dark current and an improved signal to noise ratio. Also disclosed are processes for forming the photodiode.